



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

AP

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,111	01/04/2002	Venkatesh R. Iyer	NAIIP066/01.308.01	8633
758	7590	04/20/2007	EXAMINER	
FENWICK & WEST LLP SILICON VALLEY CENTER 801 CALIFORNIA STREET MOUNTAIN VIEW, CA 94041			SWARINGEN, JEFFREY R	
		ART UNIT		PAPER NUMBER
		2145		
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/20/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/039,111	IYER ET AL.	
	Examiner Jeffrey R. Swearingen	Art Unit 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 01 February 2007.
- 2a) This action is **FINAL**.                                   2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-9, 11, 13-22, 24, 26, 27, 29 and 30 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) \_\_\_\_\_ is/are rejected.
- 7) Claim(s) 1-9, 11, 13-22, 24, 26, 27, 29 and 30 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION*****Response to Arguments***

1. Applicant's arguments filed 2/1/2007 have been fully considered but they are not persuasive.
2. Applicant's originally filed specification failed to disclose the following information provided in page 12 of Applicant's remarks filed 5/22/2006. "Since the state machine tracks the last seen verb and conversation flows, it is clear to one of ordinary skill in the art that the validity of the state machine can be determined, for example, by considering the last seen verb and the conversation flow as stored in the state machine to determine whether any errors, complications, or network mishaps have caused an invalid state of the state machine to occur." Applicant's specification never provided information revealing the tracking of the last seen verb and the conversation flow, and considering both of those as stored in the state machine to determine whether any errors have caused an invalid state. If Applicant disagrees with this, Applicant must point to where in the originally filed specification this is located.
3. Applicant failed to provide adequate information describing what is meant by an application verb. As detailed in the remarks of the last Office Action, Applicant failed to provide a reasonable definition of an application verb in the specification. Applicant responded by quoting the portions of the specification previously cited as providing this deficiency in the specification.
4. Applicant failed to provide information describing the determination of validity for an application verb. Applicant stated the validity of the state machine was determined by detecting whether an "invalid state" had occurred. One of ordinary skill in the art cannot determine validity by using invalidity if validity is not defined. Validity and invalidity are integrally related.
5. Applicant argued "aggregating packet data into flows" and "aggregating the packet data into a flow" were taught by the specification. It is not asserted that Applicant has limited the claims in any manner. Applicant failed to describe how the aggregation occurs in a manner to allow one of ordinary skill in the art to interpret the terms in the manner in which Applicant wishes the interpretation to be limited to during prosecution. Applicant's cited portions of the specification do not provide one of ordinary skill in the art with adequate information to understand Applicant's exact meaning behind the aggregation of packet data into flows, which necessitated the broad reading of the claims over the prior art.

Art Unit: 2145

6. Applicant's amendments to the claims do not rectify the enablement issue. Applicant's claims still allow for race conditions to be present in the machine, as Applicant has not forced the machine to stabilize after the update of the machine. It is well known in the art that a system update can cause cascading issues requiring the machine to settle into a steady state operation before any accurate measurement of the status of the machine can be ascertained with a degree of certainty.

7. Applicant's desire to keep the claims broad leads one of ordinary skill in the art to be unclear what Applicant means by the predetermination of criteria to determine the validity of an application verb. The claims are indefinite since one of ordinary skill in the art is unclear what they actually mean.

8. Applicant argued Dietz failed to disclose *responsive to updating the state machine, determining whether the state machine is in a valid state*. If the packet was received, then logically the state machine was determined to be in a valid state.

9. Applicant argued Dietz failed to disclose *responsive to determining that the state machine is in a valid state...storing the information related to the application verbs*. As stated above, the receipt of a packet meant that the state machine was in a valid state. *Ergo*, if every packet was stored by Dietz, this was done *responsive to determining whether the state machine is in a valid state*.

10. Applicant argued Dietz failed to disclose *the application verbs being valid if predetermined criteria indicate that response times of the application verbs should be measured*. See column 11, lines 55-58.

11. Applicant provided no new arguments concerning the Dietz reference in this response.

#### ***Claim Rejections - 35 USC § 112***

12. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

13. Claims 1-9, 11, 13-22, 24, 26-27 and 29-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art

Art Unit: 2145

that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant failed to describe in the specification how validity was determined for an application verb or a state machine or what validity consisted of. Applicant failed to describe in the specification how data from a packet would be separated into multiple flows.

14. Claims 1-9, 11, 13-22, 24, 26-27 and 29-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. As currently amended, the language of claims 1, 14, and 27 refers to *updating a state machine determining whether the state machine is in a valid state*. It is not possible to update a state machine that determines whether said state machine was in a valid state, since such updating would prevent said state machine from performing said determination accurately.

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. Claims 1-9, 11, 13-22, 24, 26-27 and 29-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

17. Applicant defined application verb as being any transaction. One of ordinary skill in the art would be unable to ascertain what was used as the benchmark to determine validity of an application verb. Multiple interpretations exist of this concept, including validity based on a numeric value, validity based upon the complete error free receipt of a data transmission, validity based on the result of the transaction, validity based upon comparing the content of a data transmission to a table, and validity based upon the parameters of the flow.

Art Unit: 2145

18. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

19. Claims 1-9, 11, 13-22, 24, 26-27, and 29-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Dietz (U.S. Patent No. 6,839,751).

20. In regard to claims 1, 14, and 27, Dietz disclosed *receiving packet data; aggregating the packet data into flows; identifying application verbs and information relating to them associated with the flows; determining whether the application verbs are valid, the application verbs being valid if predetermined criteria indicate that response times of the application verbs should be measured; responsive to determining that the application verbs are valid, updating a state machine determining whether the state machine is in a valid state; and responsive to determining that the state machine is in a valid state, storing the information relating to the application verbs, wherein the information relating to the application verbs is capable of being used to calculate response times associated therewith*. In column 7, lines 53-65, an embodiment was presented wherein the packet was examined to produce a signature relating the packet to a network flow. This signature was compared with future packets, or *determining whether the application verbs are valid*. If the signature was a new application, the signature was created, *updating a state machine responsive to determining whether the state machine is in a valid state*. See further column 11, lines 59-63, where *responsive to determining that the state machine is in a valid state, storing the information relating to the application verbs*. See further Abstract; column 2, lines 11-27; column 2, lines 44-46; column 4, lines 14-33; column 5, line 65 – column 6, line 19; column 11, lines 11-58; column 12, lines 55-65; column 13, lines 1-27; column 22, line 61 – column 23, line 6; column 31, lines 25-47; column 32, lines 1-51.

Art Unit: 2145

21. In regard to claims 2 and 15, Dietz further disclosed *determining whether the packet data is associated with a new flow*. See Dietz, column 4, lines 26-30.
22. In regard to claims 3 and 16, Dietz further disclosed *if the packet data is determined to be associated with a new flow, further comprising creating a flow, creating a data structure, and inserting the data structure into the flow*. See Dietz, column 4, lines 16-20; column 9, lines 40-58.
23. In regard to claims 4 and 17, Dietz further disclosed *identifying a protocol identifier associated with the flow, and determining a number of known application verbs associated with the protocol identifier*. See Dietz, column 6, lines 20-35; column 7, lines 53-65; column 9, lines 27-67; column 11, lines 30-36.
24. In regard to claims 5 and 18, Dietz further disclosed *allocating memory for the data structure based on the number of known application verbs associated with the protocol identifier*. See Dietz, column 11, lines 30-36.
25. In regard to claims 6 and 19, Dietz further disclosed *the number of application verbs associated with the protocol identifier is determined utilizing a map*. See Dietz, column 27, line 41 – column 28, line 55.
26. In regard to claims 8 and 21, Dietz further disclosed *inserting a data structure into the flows*. See Dietz, column 4, lines 16-20; column 9, lines 40-58.
27. In regard to claims 9 and 22, Dietz further disclosed *populating and updating the data structure with the information*. See Dietz, column 9, lines 40-58.
28. In regard to claims 11 and 24, Dietz further disclosed *determining whether a response is complete, and calculating a response time if it is determined that the response is complete*. See Dietz, column 22, line 61 – column 23, line 10; column 40, lines 26-52.
29. In regard to claims 13 and 26, Dietz further disclosed *the information relating to the application verbs is capable of being used to calculate response times associated therewith in real-time*. See Dietz, column 32, lines 1-51.
30. The limitations of claim 30 are embodied within claims 1-6, 8-9, and 11.

Art Unit: 2145

31. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

32. Claims 7, 20 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dietz.

33. In regard to claims 7 and 20, Dietz did not explicitly state the use of RMON. Dietz described that avoiding the use of RMON will improve performance in the system in column 34, lines 61-67. It would have been obvious to one of ordinary skill in the art at the time of the invention to use RMON with Dietz since Dietz stated that he found a way to avoid using RMON in order to improve system performance. Therefore, according to Dietz, the use of RMON was an older technological variant of the Dietz invention.

34. Claim 29 has substantially the same limitations as claims 1 and 4-7.

### ***Conclusion***

35. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2145

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. Swearingen whose telephone number is (571) 272-3921. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on 571-272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jason Cardone  
Supervisory Patent Examiner  
Art Unit 2145